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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/561,065
Filing Date: February 24, 2006
Appellant(s): BEVILACQUA ET AL.

James V. Costigan
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed October 21, 2009 appealing from the Office action mailed April 1, 2009.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

3,587,972	Weeth	6-1971
4,582,257	Siegler	4-1986

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

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Claims 1, 3, 4, 6, 7, 9, 10, 13, 14, 17-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 14 and 20 recite "expected operating pressures" in line 6. The specification fails to teach expected operating pressures.

Applicant argues that Weeth and Siegler do not disclose "vaporization nozzle" because they do not use the term "vaporization." Weeth and Siegler both disclose spray nozzles. Applicant's vaporization nozzle appears to be nothing more than a spray nozzle. In light of applicant's argument, it is uncertain how to interpret "vaporization nozzle." The term "vaporization" is defined as

1. the act of vaporizing.
2. the state of being vaporized.
3. the rapid change of water into steam, esp. in a boiler.

The term "vapor" is defined as

a visible exhalation, as fog, mist, steam, smoke, or noxious gas, diffused through or suspended in the air

It would appear that a nozzle that causes a mist would constitute a vaporization nozzle. A nozzle that sprays water, such as one disclosed by Weeth or Siegler, would constitute such a nozzle. Applicant's specification fails to teach what would constitute a "vaporization nozzle." Applicant merely alleges that a sprinkling means or a sprinkler does not constitute a vaporization nozzle. Applicant is required to provide an interpretation that should be given to the term "vaporization nozzle."

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Claims 14, 17, 18, 20-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 14 recites the broad recitation "expected operating pressure", and the claim also recites "higher than 50 bar" which is the narrower statement of the range/limitation.

Claim 17 recites the limitation "a base" in line 5. It appears to be a double inclusion of the "base" recited in line 3.

Claim 17 recites the limitation "...and includes curved elements..." starting on line 7. It is uncertain what "includes" refers to.

Claim 18 recites the limitation "a cylindrical shaped body" in line 6. It appears to be a double inclusion of the vaporization nozzle.

Claim 18 recites the limitation "and a tongued terminal part..." It is uncertain whether it should be read as "said shaped blocking element comprises a first blocking element...and a tongued terminal part..." or "...for holding the vaporization nozzle in direct contact with a cylindrical shaped body and a tongued terminal part..."

Claim 18 appears to recite an additional element "a second blocking element" in lines 8-9. Parent claim 1 recites the transitional phrase "consisting" which is close ended.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte*

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Hasche, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 20 recites the broad recitation “expected operating pressure”, and the claim also recites “higher than 50 bar” which is the narrower statement of the range/limitation.

Claim 21 recites the limitation “a base” in line 5. It appears to be a double inclusion of the “base” recited in line 3.

Claim 21 recites the limitation “...and includes curved elements...” starting on line 6. It is uncertain what “includes” refers to.

Claim 22 recites the limitation “a cylindrical shaped body” in line 6. It appears to be a double inclusion of the vaporization nozzle.

Claim 22 recites the limitation “and a tongued terminal part...” It is uncertain whether it should be read as “said shaped blocking element comprises a first blocking element...and a tongued terminal part...” or “...for holding the vaporization nozzle in direct contact with a cylindrical shaped body and a tongued terminal part...”

Claim 22 appears to recite an additional element “a second blocking element” in lines 8-9. Parent claim 19 recites the transitional phrase “consisting” which is close ended.

Claim 23 recites the limitation “a base” in line 16. It appears to be a double inclusion of the “base” recited in line 15.

Claim 23 recites the limitation “...and includes curved elements...” starting on line 18. It is uncertain what “includes” refers to.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since

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the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 26 recites the broad recitation "expected operating pressure", and the claim also recites "higher than 50 bar" which is the narrower statement of the range/limitation.

Claim 27 recites the limitation "a cylindrical shaped body" in line 6. It appears to be a double inclusion of the vaporization nozzle.

Claim 27 recites the limitation "and a tongued terminal part..." It is uncertain whether it should be read as "said shaped blocking element comprises a first blocking element...and a tongued terminal part..." or "...for holding the vaporization nozzle in direct contact with a cylindrical shaped body and a tongued terminal part..."

Claim 27 appears to recite an additional element "a second blocking element" in lines 8-9. Parent claim 23 recites the transitional phrase "consisting" which is close ended.

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Claims 1, 3, 4, 7, 9, 10, 13, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weeth (3,587,972) in view of Siegler (4,582,257).

Weeth discloses a water vaporization distribution plant consisting of:

- at least one feeding collector 14;
- nozzle-holder ramps 16, 18, 20, 22, 24, 26;
- a series of vaporization nozzles 30;
- first tighteners 28;
- second tighteners 32;
- a shape blocking element 38.

Weeth differs from what is claimed in the nozzle-holder ramps having a square or rectangular section.

Siegler discloses, in the Background of the Invention, that rectangular cross section hoses are well known.

It would have been obvious to a person having ordinary skill in the art at the time of the invention to have made the nozzle-holder ramps of Weeth with a rectangular cross section as taught by Siegler to assist in directing the outlet opening upwards, i.e., prevent rolling of Weeths flexible pipes.

Regarding claim 9, Weeth differs from what is claimed in the nozzle holder ramps having threaded sections in the first ends. Weeth discloses, in column 2, lines 42-45, "Branch line 16 is mad up of a number of flexible longitudinal sections of pipe...suitably coupled together." Threads are well known. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have provided threaded

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sections in the first ends of the nozzle holder ramps in the device of Weeth for ease in assembly.

Regarding claims 13 and 19, Weeth in view of Siegler discloses the limitation of the claimed invention with the exception of the second tighteners 32 being made of corrosion resistant steel. Corrosion resistant steel is well known in the art. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have made the second tighteners 32 of Weeth in view of Siegler for increased strength.

(10) Response to Argument

Appeal Brief Section vii.I

Appellants argue that the recitation “expected operating pressures” in claims 14 and 20 is enabled because the claimed invention is used in feeding gas turbines (page 1, line 10) and the specification discloses that the apparatus should be resistant to fluid circulation within a pressure range preferably of 70-120 bar (page 7, lines 9-11). The disclosure of usage in feeding gas turbines is not an enablement for expected operating pressures. Arguably, there are wide ranges of turbine operating feeding pressures. The specification fails to teach any feeding pressures. Additionally, these operating pressures can change with future turbines. At the least, the recitation is indefinite because definite operating pressures cannot be determined. The disclosure on page 7, lines 9-11 is directed to collectors 13. Claims 14 and 20 are directed to first tighteners and second tighteners.

Appellants argue that vaporization nozzle is enabled by the present application because vaporization nozzles 14 are disclosed on page 8, line 24. Additionally, detailed description of nozzle 14 is given beginning on page 10, line 24 and continuing to page 11, line 14. The issue is not that nozzle 14 is not disclosed. It is rather that the term "vaporization" is not enabled, because based on appellants' arguments, it is uncertain how to define the term because the specification fails to define the term. Appellants argue that the prior art fails to disclose vaporization merely because the term is not used by the prior art. The spray disclosed in the prior art appears to constitute "vaporization" as the term is normally understood, the generation of mist by spraying. Since appellants fail to provide basis for their allegation that the prior art fails to disclose vaporization, one of ordinary skill in the art cannot determine the metes and bounds of "vaporization" based on the specification.

Appeal Brief Section vii.II

Appellants argue that the recitation "expected operating pressures and higher than 50 bar" does not constitute a range within a range because "expected operating pressures" is merely modified by the threshold minimum of "50 bar." Appellants are arguing that the recitation defines a range between 50 bars and expected operating pressures. The plain meaning of "...with work tolerances resistant to expected operating pressures and higher than 50 bar" does not support appellants' interpretation. The recitation does not indicate a range between 50 bar and expected operating pressures because (1) "expected operating pressures" is indicate plural pressures which in itself is a range; (2) "higher than 50 bar" is a range in itself; and (3) appellants'

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interpretation would have no meaning where the expected operating pressures are less than 50 bar since then the expected operating pressures would be not be an upper limit. Additionally, the recitation is indefinite because the specification fails to provide what pressures are defined by "expected operating pressures."

Appellants argue that use of the same term "a base" in claims 17, 21 and 23 does not make the claim indefinite. It appears that appellants' argument is an admission that both recitations of "a base" refers to the same base of the U-shaped blocking element 41. The use of the indefinite article "a" in both recitations is an indicator that the claims require two "bases."

Appellants argue that the term "includes" in claims 17 and 21 is not indefinite and the term "and" refers back to the shaped blocking element. Claims 17 and 21 recites "..., and includes curved elements (45) at each of said two free ends of said shaped blocking element,..." The use of a comma before "and includes" and the repetition of "said shaped blocking elements" indicates that "and includes" refers back to the water vaporization distribution plant. Such an interpretation would define the "curved elements" as an element of the vaporization distribution plant. Appellants' interpretation would define the "curved elements" as a sub-element of the shaped blocking element. Grammatical usage of the comma requires an interpretation that precludes appellants' interpretation.

Appellants argue that the term "a cylindrical shaped body" is not a double inclusion of the vaporization nozzle in claims 18 and 22. Appellants argue that the specification identifies the cylindrical body (28) as part of the vaporization nozzle (14).

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This is precisely the point. The specification defines the cylindrical body (28) as part of the vaporization nozzle (14), but claims 18 and 22 define the cylindrical body (28) and the vaporization nozzle (14) as separate elements of the water vaporization distribution plant. Claims 18 and 22 do not define the cylindrical body (28) as a sub-element of the vaporization nozzle (14).

Appellants argue that claims 18, 22 and 27 are not indefinite for adding a limitation to a prior claim that uses the transitional phrase "consisting of." Dependent claims 18, 22 and 27 add the "second blocking element (48)" as an element of the water vaporization distribution plant. Parent claims 1, 19 and 23 recite the close ended transitional phrase "consisting of" which limits the elements of the water vaporization distribution plant to the elements defined in the parent claims. The dependent claims can only further define the elements identified in the parent claims. MPEP 2111.03.

Appellants argue that the recitation "and a tongued terminal part..." in claims 18 and 22 do not lend to two interpretations. Claims 8 and 22 recite,

...said shaped blocking elements comprises a first blocking element (141) which has an insertion hole (49) for holding the vaporization nozzle (14) in direct contact with a cylindrical shaped body (28) and a tongued terminal part (47) which is inserted and blocked, by folding, in a slit (5) situated in a second blocking element (48)...

The plain meaning has two possible readings: first, the shaped blocking elements comprises a first blocking element (141) and a tongued terminal part (47); and second, the intended use of the insertion hole (49) is for holding the vaporization nozzle (14) in direct contact with both a cylindrical shaped body and a tongued terminal part (47).

Appeal Brief Section vii.III

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Appellants argue that Weeth fails to disclose "vaporization." Appellants are absolutely correct that Weeth does not use the exact term "vaporization." The term "vaporization" is defined as

1. the act of vaporizing.
2. the state of being vaporized.
3. the rapid change of water into steam, esp. in a boiler.

The term "vapor" is defined as

a visible exhalation, as fog, mist, steam, smoke, or noxious gas, diffused through or suspended in the air

See dictionary.com. It would appear that a nozzle that causes a mist would constitute a vaporization nozzle. A nozzle that sprays water, such as one disclosed by Weeth or Siegler, would constitute such a nozzle. The spray that results from Weeth or Siegler constitutes a mist. Appellants allege that Weeth does not disclose vaporization but fail to provide evidence to support the assertion.

Appellants argue that Siegler's rectangular sections are not attached to any type of a nozzle. Appellants' claimed invention does not preclude reading nozzle holder ramps on Weeth's flexible pipes 16, 18, 20, 22, 24, 26. Siegler teaches rectangular cross section flexible pipes (hoses).

Appellants argue that the term "vaporization" is explicit and definite and it points out a nozzle that transforms a liquid to a vapor state. Appellants are arguing one specific definition of "vaporization," i.e., a gas phase at a temperature below its critical temperature. Appellants' specification fail to limit "vaporization" to such a definition. The broadest reasonable interpretation would allow the dictionary definition that includes the act of misting. Additionally, appellants are claiming an apparatus. The

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term "vaporization" in "vaporization nozzle" describes the intended use of the nozzle. It is merely a name for the nozzle that has the capability to produce vapor, which includes mist. Weeth's nozzles 30 are spray nozzles (column 3, lines 70). Weeth teaches nozzle length, opening size and water pressure as controlling parameters of the spray. Even if Weeth's nozzles 30 do not produce vapor, they have the ability to spray vapor, i.e., if vapor was supplied to the device of Weeth, and therefore constitute "vaporization nozzles."

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Christopher S. Kim/

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